

## REMARKS

In accordance with the foregoing, the Title has been amended and claims 1-16 are pending. No new matter is believed to have been added.

### I. OBJECTION TO THE TITLE.

The title of the Invention has been amended and is believed descriptive.

### II. REJECTION OF CLAIMS 1-3, 6 AND 8-16 UNDER 35 USC 102(a) AS BEING ANTICIPATED BY KIM (US PAT. NO. 6,509,556, "KIM").

Applicant respectfully traverses this rejection because Kim does not teach every limitation of the claimed invention.

Kim discloses a microwave oven with a ventilation assembly to discharge gas from a range below the microwave oven and to provide a variety of airflows inside the microwave oven. (See Kim col. 1, lines 8-13 and col. 2, lines 49-56). Kim uses a radial fan 124 to discharge air in a shaft direction to cool the electric fitting room 136 and discharge the heat to the outside of the microwave oven. (See Kim FIG. 4, and col. 5, lines 2-12).

In contrast, claim 1 recites "[a] wall-mounted microwave oven for use in cooking food comprising: a cabinet mounted at a rear surface thereof on a wall of a cooking space, and having a cooking chamber to cook the food therein, and a machine room to house a plurality of electrical components for use in cooking the food, and which is isolated from the cooking chamber; an exhaust path to exhaust contaminated air generated from a cooking appliance installed below the wall-mounted microwave oven; **a cooling-ventilation path to cool the machine room and to ventilate the cooking chamber**; and a blower fan assembly including a drive motor having a pair of shafts at both ends thereof to generate a rotating force, an exhaust fan joined to one shaft of the drive motor to create a suction force and a propulsive force to cause the contaminated air to flow along the exhaust path, and **a cooling-ventilation fan joined to the other shaft of the drive motor to create a suction force and a propulsive force to cause air to flow along the cooling-ventilation path.**"

Kim does not teach "**a cooling-ventilation path to cool the machine room and to ventilate the cooking chamber.**" As is clear from FIG. 4 of Kim, the radial fan 124 does not ventilate the cooking chamber. Thus, claim 1 is not anticipated by Kim.

Claims 8, also recites the same limitation, "a cooling-ventilation path to cool the machine room and ventilate the cooking chamber." Claim 12 recites "a cooling-ventilation path to cool the machine room **and then ventilate the cooking chamber.**" Since Kim does not teach at least the above limitations, each of these independent claims is also believed allowable.

Claims 2-3, 6, 9-11 and 13-16 are dependent claims, and thus are believed allowable at least for their dependence upon allowable independent claims.

In view of the above, it is respectfully submitted that the rejection of claims 1-3, 6 and 8-16 is overcome.

### **III. REJECTION OF CLAIMS 4, 5, AND 7 UNDER 35 USC 103 AS BEING UNPATENTABLE OVER KIM (US PAT. NO. 6,509,556, "KIM") IN VIEW OF MAEDA ET AL. (US PAT. NO. 5,981,929, "MAEDA") OR KAMINAKA (US PAT. NO. 4,786,774, "KAMINAKA").**

Applicants respectfully traverse the Examiner's 103 rejection, as a prima facie case of obviousness has not been properly established. (MPEP §2142).

Each of claims 4, 5 and 7 depend either directly or indirectly from independent claim 1. Thus, as discussed above in the arguments for allowance of claim 1, Kim does not teach or suggest a wall-mounted microwave oven for use in cooking food comprising **"a cooling-ventilation path to cool the machine room and to ventilate the cooking chamber;** and a blower fan assembly including a drive motor having a pair of shafts at both ends thereof to generate a rotating force, an exhaust fan joined to one shaft of the drive motor to create a suction force and a propulsive force to cause the contaminated air to flow along the exhaust path, and **a cooling-ventilation fan** joined to the other shaft of the drive motor to create a suction force and a propulsive force **to cause air to flow along the cooling-ventilation path,"** as recited in claim 1.

Thus, claims 4, 5 and 7 are believed allowable for at least their dependence on an allowable independent claim. Additionally, these claims recite patentably distinguishing features of their own. For example, claim 4 recites "the cooling-ventilation path includes a front inlet disposed on a front surface of the cabinet to allow outside air to be introduced into the cabinet, a front outlet disposed on the front surface of the cabinet to allow the air introduced into the cabinet to be discharged to the outside of the microwave oven, a suction path section to guide the air introduced through the front inlet, toward the cooling-ventilation fan, an exhaust path section to guide the air exiting from the machine room through the cooking chamber and toward

the front outlet, a first communicating hole formed at a side surface of the machine room to allow the air discharged from the cooling-ventilation fan to be introduced into the machine room, a second communicating hole formed at a partition plate, which is positioned between the machine room and the cooking chamber to isolate the machine room and the cooking chamber from each other, to allow the machine room to communicate with the cooking chamber, and a third communicating hole to allow the cooking chamber to communicate with the exhaust path section.”

Furthermore, the Action alleges, “the exact flow path would have been a mere engineering variation of the air flow path f shown in Figure 4 of Kim.” However, this is merely an unsupported conclusory statement made with the benefit of hindsight. As noted by the U.S. Patent and Trademark Office Board of Patent Appeals and Interferences, an “examiner’s assertion... that the proposed modification would have been “an obvious matter of engineering design choice well within the level of skill of one of ordinary skill in the art” is a conclusion, rather than a reason.” (See In re Garrett, 1986 Pat. App. LEXIS 8 (Bd. Pat. App. 1986).

Kim discloses a ventilation path using an axial fan to direct air along path f to cool the electric fitting room and using a sirocco fan to exhaust air below the microwave oven. Nothing in Maeda or Kaminaka provides evidenced motivation why one skilled in the art would be motivated to modify Kim to achieve the claimed invention and it is improper to merely allege an engineering choice as the motivation.

In view of the above, it is respectfully submitted that the rejection of claims 4, 5 and 7 is overcome.

#### **IV. CONCLUSION.**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: Steven W. Crabb  
Steven W. Crabb  
Registration No. 46,092

1201 New York Avenue, NW, Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501